

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 3, 4, 7-9, 11, 12 and 15-23 are pending.

I. Rejection under 35 U.S.C. § 103

In the Office Action, at page 2, numbered paragraph 2, claims 1, 3, 7, 9, 11, 15 and 17-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,181,670 to Nagasato et al. in view of U.S. Patent No. 6,130,418 to Van Rosmalen et al. This rejection is respectfully traversed because the combination of the teachings of Nagasato and Van Rosmalen does not suggest:

- a focusing coil member and a tracking coil member installed on the base, separated from each other; and
- a single magnet member installed on the blade between the focusing coil member and the tracking coil member,
- wherein the focusing coil member, the tracking coil member and the single magnet member are installed on one side of the objective lens,

as recited in independent claims 1 and 9.

Nagasato discusses that the focusing and tracking coils for each of two coil units 112, 114 are disposed on a base block 8 and that two magnets 5a-d, 116, 118 are disposed on a lens holder opposite the two coil units 112, 114. However, Nagasato does not distinguish that the focusing and tracking coil members are separated from each other, that a single magnet member is installed on the lens holder between the focusing coil member and the tracking coil member and that the focusing coil member, tracking coil member and the single magnet member are installed on one side of the objective lens. Nagasato shows that each coil unit includes both focusing and tracking coil members, but Nagasato does not suggest that either of the focusing coil members are separated from tracking coil members, as both sets of focusing coil members are combined with tracking coil members and both sets of tracking coil members are combined with focusing coil members. In particular, as claim 1 recites "a single magnet member," then if one of the magnets in Nagasato was removed, a focusing coil member would not be separate from a tracking coil member, as coil unit 112, for example, would be unnecessary.

In addition, the Examiner concedes that Nagasato does not suggest that a single magnet member is installed on the blade between the focusing coil member and the tracking coil member that are both installed on the base of the optical pickup actuator. The Examiner indicates that Van Rosmalen makes up for the deficiencies in Nagasato. The Applicants respectfully disagree.

Van Rosmalen discusses an optical pickup actuator including a permanent magnet 45, ferromagnetic members, a focus coil 39 and two tracking coils 41. The focus coil 39, the tracking coils 41 and a main lens 15 are carried by a movable part 35 of the optical pickup actuator. The permanent magnet 45 and the ferromagnetic members are carried by a stationary part 33 of the optical pickup actuator.

First, Van Rosmalen does not discuss or suggest a single magnet member. Van Rosmalen particularly discusses that the optical pickup actuator includes ferromagnetic members. Thus, Van Rosmalen is not suggestive of a single magnet member disposed between a focusing coil member and a tracking coil member.

Further, the magnets are not installed on a blade which carries an objective lens. The magnets are installed on the stationary part 33 and not on the movable part 35 that carries the lens 15, which is directly in opposition to the language of claim 1, as claim 1 requires that the magnets be installed on a blade having an objective lens.

In addition, Van Rosmalen does not discuss or suggest that the focus coil 39 and the tracking coils 41 are installed on a base and separated from each other. The focus coil 39 and the tracking coils 41 are carried by the movable part 35 and not by the stationary part 33, which is directly in opposition to the language of claim 1.

While Van Rosmalen does show a focusing coil member separated from tracking coil members, and magnet members installed between the focusing coil member and the tracking coil members, where the focusing coil member, the tracking coil members and the single magnet member are installed on one side of the objective lens, Van Rosmalen is not suggestive of the focusing coil member and the tracking coil members being installed on a base and a single magnet member being installed on a blade having an objective lens.

Additionally, combining the optical pickup actuator of Van Rosmalen with the apparatus of Nagasato would render Nagasato inoperable for its intended purpose, which is not permitted in establishing a *prima facie* case of obviousness, in accordance with M.P.E.P. § 2143.01. Nagasato specifically utilizes two sets of coil units 112, 114, multiple magnets 116, 118 and multiple magnetic blocks 136, 138. First, if Nagasato were to utilize the permanent magnet and

ferromagnetic members of Van Rosmalen, but without both sets of coil units 112, 114 or without an additional permanent magnet, Nagasato would be rendered inoperable for its intended purpose, which is to be able to correct the tilt of the objective lens 1 relative to the signal recording surface of the optical disk. Without two sets of coil units 112, 114, and two opposing magnets 116, 118, the apparatus of Nagasato would not be able to perform its intended purpose.

In addition, it is entirely unclear as to how Van Rosmalen would be incorporated into the apparatus of Nagasato. In Van Rosmalen, the permanent magnet 45, the ferromagnetic members, the focus coil 39 and the tracking coils 41 are all situated on one side of the objective lens 15. It is unclear as to how or where the permanent magnet 45, the ferromagnetic members, the focus coil 39 and the tracking coils 41 would be situated if the apparatus of Van Rosmalen were incorporated into the objective lens driving apparatus of Nagasato.

Further, while the focusing and tracking coils of Nagasato may be supported by a base 8 and the magnets 116, 118 are supported at the movable lens holder 2, the focus coil 39 and the tracking coils 41 of Van Rosmalen are supported by the movable part 35 of the apparatus and the permanent magnet 45 and ferromagnetic members are supported by the stationary part 33. Thus, it is unclear as to how or where the focus 39 and tracking 41 coils and the permanent magnet 45 and ferromagnetic members of Van Rosmalen would be able to be incorporated into the apparatus of Nagasato.

Additionally, the Examiner indicates that "it would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of installing all of the elements on one side of the objective lens and a single magnet into the system of Nagasato et al. as taught by Van Rosmalen et al. The motivation would be to reduce the device in size and thickness to reduce costs and to have an efficient use of the magnetic driving forces." The Applicants respectfully disagree.

While the motivation cited by the Examiner explains why one of ordinary skill would want to situate the focus and tracking coils of Nagasato and a single magnet on one side of the objective lens 1 of Nagasato, the motivation cited does not explain why the focus and tracking coils and a single magnet would be placed at one side of the objective lens and the focusing and tracking coil members would be installed on a base and with the single magnet member installed on a blade having the objective lens. The motivation cited by the Examiner does not clarify as to how or why this would occur in combining Van Rosmalen and Nagasato.

In contrast, the present specification particularly states at page 2, paragraph 0010 that one of the problems with a conventional asymmetric optical pickup actuator is that since the coils are directly in contact with the blade in which the objective lens is mounted, heat generated by applying current to the coils is directly transferred to the blade and the objective lens, thereby reducing the rigidity of the blade. At page 10, paragraph 0054, the present specification states that in the optical pickup actuator of the present invention, even though the optical pickup actuator has a slim type, the actuator does not have reduced performance due to heat. The motivation cited by the Examiner does not explain how or why the focusing coil, tracking coil and magnets of Nagasato would be positioned at one side of the objective lens, particularly where the focusing and tracking coils are installed at the stationary base and a single magnet is installed at a movable part including the objective lens. The present invention provides for such so that heat is not directly transferred to the movable part that includes the objective lens. KSR Int'l Co. v Teleflex Inc. requires that there be an apparent reason to combine the known elements in the fashion claimed by the application at issue. See KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1740 (2007). Here, there is no apparent reason to combine Nagasato and Van Rosmalen.

Therefore, as the combination of the teachings of Nagasato and Van Rosmalen does not suggest "a focusing coil member and a tracking coil member installed on the base, separated from each other; and a single magnet member installed on the blade between the focusing coil member and the tracking coil member, wherein the focusing coil member, the tracking coil member and the single magnet member are installed on one side of the objective lens," as recited in independent claims 1 and 9, and as the motivation cited is inadequate to suggest combining the teachings of Nagasato and Van Rosmalen, claims 1 and 9 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Also, the combination of the teachings of Nagasato and Van Rosmalen does not suggest "driving a coil system including a focusing coil member and a tracking coil member, separated from the blade, such that an interaction with a single magnet on the blade by one of the focusing coil member and the tracking coil member controls the moving of the blade in the tracking and/or focusing directions," as recited in independent claim 17. In addition, the combination of the references would render Nagasato unsatisfactory for its intended purpose and the motivation cited is inadequate. Therefore, claim 17 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Claims 3, 7, 11, 15 and 18-23 depend either directly or indirectly from independent claims 1, 9 and 17 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 23 recites "performing the optical pickup actuating method of claim 19 to control the recording and/or reproducing of data to/from the recording medium to generate the electrical signal registered as the stored data, when performing the reproducing process, or to stored data on the recording medium based on the electrical signal, when performing the recording process." Therefore, claims 3, 7, 11, 15 and 18-23 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

In the Office Action, at page 6, numbered paragraph 3, claims 4, 8, 12 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagasato in view of Van Rosmalen, further in view of U.S. Publication No. 2003/0198148 to Choi. This rejection is respectfully traversed.

As discussed above with respect to independent claims 1 and 9, the combination of the teachings of Nagasato and Van Rosmalen does not suggest all the features of independent claims 1 and 9. Choi fails to make up for the deficiencies in Nagasato and Van Rosmalen. Claims 4, 8, 12 and 16 depend either directly or indirectly from independent claims 1 and 9 and include all the features of claims 1 and 9, plus additional features that are not discussed or suggested by the references relied upon. For example, claim 4 recites that "the pair of tilt driving coil members are installed under the one coil member used as the focusing coil member." Therefore, claims 4, 8, 12 and 16 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejections is respectfully requested.

Conclusion

In accordance with the foregoing, claims 1, 3, 4, 7-9, 11, 12 and 15-23 are pending and under consideration.

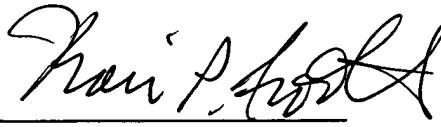
There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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